

UNIFORM LASER EXCITATION AND DETECTION IN CAPILLARY ARRAY  
ELECTROPHORESIS SYSTEM AND METHOD

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ABSTRACT

10 A capillary electrophoresis system comprises capillaries  
positioned in parallel to each other forming a plane. The  
capillaries are configured to allow samples to migrate. A light  
source is configured to illuminate the capillaries and the  
15 samples therein. This causes the samples to emit light. A lens  
is configured to receive the light emitted by the samples and  
positioned directly over a first group of the capillaries and  
obliquely over a second group of the capillaries. The light  
source is further configured to illuminate the second group of  
20 capillaries more than the first group of the capillaries such  
that amount of light received by the lens from the first group  
of capillaries is substantially identical to amount of light  
received from the second group of capillaries when an identical  
amount of the samples is migrating through the first and second  
group capillaries.